



## Data Paper

# Checklist of coastal fishes from Cabo Verde Archipelago

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## Abstract

## Background

Taxonomic and geographic misattributions in biodiversity inventories remain a pressing issue in biogeographical research, particularly in regions with overlapping or similar place names. The Republic of Cabo Verde (also known as Cabo Verde Islands) and the Cape Verde Peninsula (Senegal) exemplify this challenge, where historical and recent studies have struggled to provide accurate species distributions due to unverified, erroneous and ambiguous records. This underscores the necessity of comprehensive, reliable datasets to delineate species occurrences across these distinct geographic areas.

## New information

This study provides a rigorously verified inventory of coastal fish species occurring within the Exclusive Economic Zone (EEZ) of the Republic of Cabo Verde, focusing on depths between 0 and 200 metres. By delineating the faunal composition specific to Cabo Verde,



this work addresses the recurrent confusion with species lists referencing the Cape Verde Peninsula (Senegal).

A total of 393 species, distributed among 125 families and 40 orders, is documented, offering an invaluable resource for refining biodiversity assessments and providing information for conservation strategies in this biogeographically unique region. Two species, *Thalassoma newtoni* (Osório, 1891) and *Diodon eydouxii* Brisout de Barneville, 1846, are reported for the first time from Cabo Verde in this paper.

## Keywords

ichthyo-diversity, ichthyofauna distribution, new records, regional inventory, species inventory verification, tropical east Atlantic

## Introduction

Checklists are important records of local biodiversity, furnishing baseline data to support conservation initiatives and ecological investigations, as they provide a structured approach to cataloguing and tracking biodiversity (Lim et al. 2024). Wirtz et al. (2013) produced the first comprehensive, annotated and illustrated checklist of the coastal fishes of the Cabo Verde Islands, which includes previously recorded species, new non-records, doubtful species, invalid records and species for which additional data are required.

These tools enhance our understanding of species' distribution and abundance patterns, which is pivotal for implementing effective management and conservation strategies (Droege et al. 2008, Reyserhove et al. 2020, Lo Brutto 2023). Furthermore, they serve as foundational resources for improving local Red Lists and contribute to broader conservation biology efforts and also providing a standardised format for sharing taxonomic information, which is essential for collaborative conservation (Droege et al. 2008, GBIF 2017).

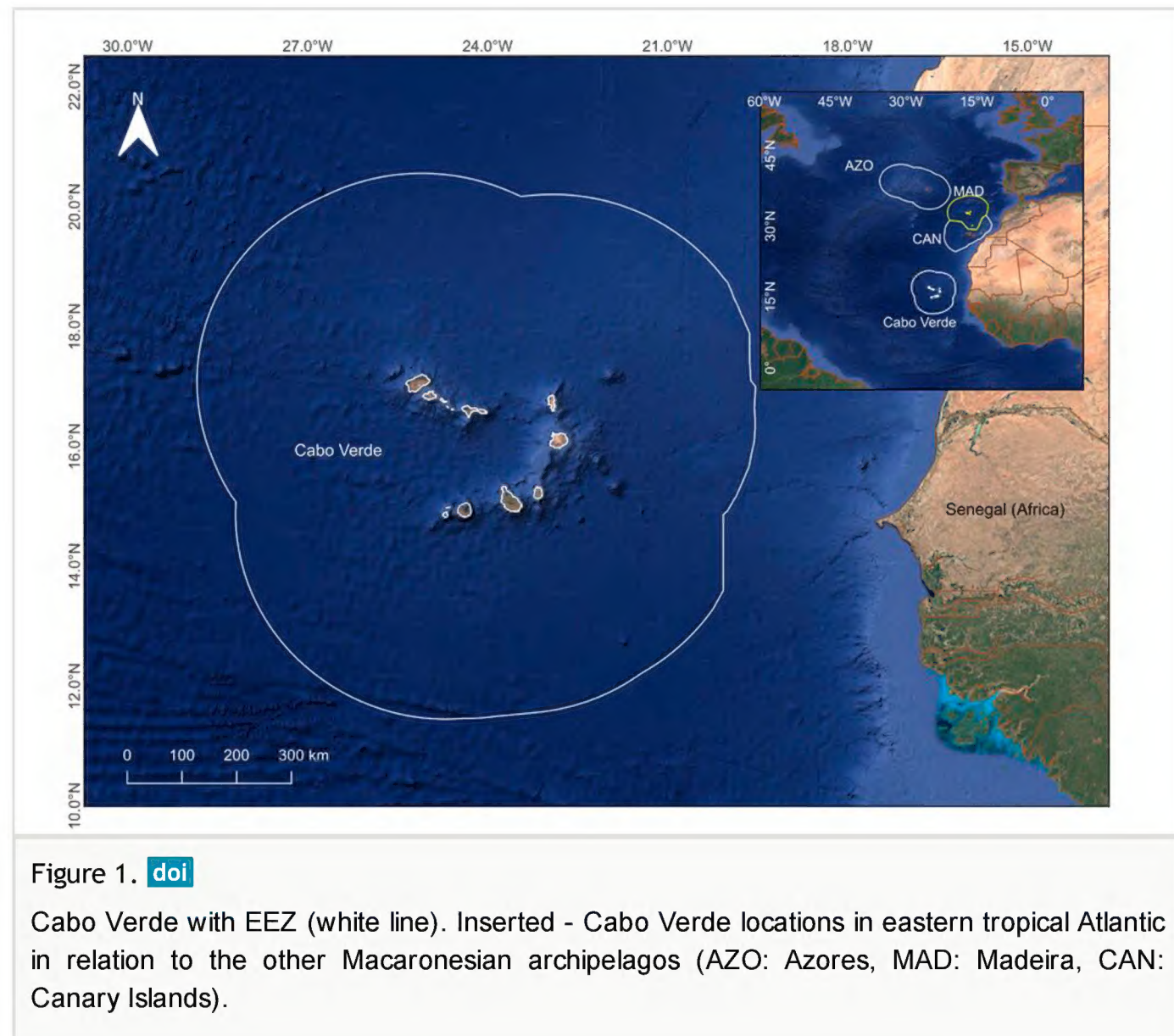
Cabo Verde is an archipelagic country located in the eastern central Atlantic (Hoving et al. 2020), west of Senegal (Fig. 1). This volcanic archipelago comprises ten main islands and several smaller islets, characterised by steep shorelines that rise from ocean depths exceeding 3,000 metres (Wenzel et al. 2020).

The archipelago lies at the eastern boundary of the North Atlantic subtropical gyre and at the southern limit of the Canary Current, while also being influenced by the North Equatorial Counter-Current. The climate is tropical, with two alternating seasons: a mild period (December to June) and a warm season (July to November) (Peña-Izquierdo et al. 2012). As in other islands within this ecoregion, Cabo Verde's weather patterns are influenced by the Atlantic Ocean and the subtropical high-pressure system. The distances, habitat heterogeneity and bathymetric features amongst island groups result in



the physical isolation of a naturally fragmented landscape, shaping the distribution patterns of the archipelago's marine fauna (Medina et al. 2007).

The Sahelian Upwelling acts as a cryptic barrier to the dispersal of nektonic marine species between Cabo Verde and the African mainland, as indicated by the differences in ichthyofauna observed by Wirtz (2009) and Wirtz (2012) between Ngor Island (Senegal) and the Cabo Verde Islands. In fact, Cabo Verde shows stronger marine faunal affinities with the Guinean Region and the Canary Islands than with the north-west African coast (Morri et al. 2000, Wirtz et al. 2013).



The Cabo Verde Islands exhibit a much higher degree of coastal fish endemism than the other Macaronesian archipelagos (i.e. the Azores, Madeira, Selvagens and Canary Islands) and, in terms of the number of endemic taxa, Cabo Verde more closely resembles the islands in the Gulf of Guinea than the north-west African coast (Wirtz et al. 2013). From the perspective of marine community structure and ichthyogeography, Cabo Verde diverges substantially from the other Macaronesian islands (Brito et al. 1999, Morri et al. 2000, Brito et al. 2006).

Historically, fish lists for Cabo Verde have been compiled from multiple sources, many of which inadvertently included data pertaining to the Cape Verde Peninsula (Senegal) rather than the archipelago. An updated, comprehensive list was, therefore, needed for



the coastal species inhabiting Cabo Verde's waters. This paper compiles the most recent data available on the archipelago's fish diversity. The ichthyological diversity of the islands is recognised as unique, with several endemic species (Table 1) (Reiner 2005, Wirtz et al. 2013, Freitas 2014).

Table 1.

Endemic coastal species (n = 23) of Cabo Verde, belonging to 13 families and seven orders.

Order	Family	Scientific name
Rajiformes	Rajidae	<i>Raja herwigi</i> Krefft, 1965
Gobiiformes	Gobiidae	<i>Gobius ateriformis</i> Brito & Miller, 2001
		<i>Gobius salamansa</i> Iglésias, Frotté & Sellos, 2015
		<i>Gobius tetrophthalmus</i> Brito & Miller, 2001
		<i>Marcelogobius janetorum</i> (Schliewen, Wirtz & Kovačić 2018)
		<i>Mauligobius nigri</i> (Günther, 1861)
Carangiformes	Soleidae	<i>Pegusa cadenati</i> Chabanaud, 1954
Beloniformes	Belonidae	<i>Platybelone lovii</i> (Günther, 1866)
Mugiliformes	Mugilidae	<i>Chelon bispinosus</i> (Bowdich, 1825)
Blenniiformes	Pomacentridae	<i>Chromis lubbocki</i> Edwards, 1986
		<i>Similiparma hermani</i> (Steindachner, 1887)
	Gobiesocidae	<i>Apletodon barbatus</i> Fricke, Wirtz & Brito, 2010
	Blenniidae	<i>Microlipophrys caboverdensis</i> (Wirtz & Bath, 1989)
		<i>Parablennius salensis</i> Bath, 1990
		<i>Scartella caboverdiana</i> Bath, 1990
	Labrisomidae	<i>Malaccoctenus carrowi</i> Wirtz, 2014
Perciformes	Pinguipedidae	<i>Parapercis atlantica</i> (Vaillant, 1887)
Centrarchiformes	Girellidae	<i>Girella stuebeli</i> Troschel, 1866
Acanthuriformes	Haemulidae	<i>Parapristipoma humile</i> (Bowdich, 1825)
	Sparidae	<i>Diplodus fasciatus</i> (Valenciennes, 1830)
		<i>Diplodus lineatus</i> (Valenciennes, 1830)
		<i>Diplodus prayensis</i> Cadenat, 1964
		<i>Virididentex acromegalus</i> (Osório, 1911)

## General description

**Purpose:** Using published works - Brito et al. (1999), Fricke et al. (2010), Hanel et al. (2010), Wirtz et al. (2013), Freitas (2014), Wirtz (2014), González et al. (2016), Freitas et al. (2018), González et al. (2018), Schliewen et al. (2018), Freitas et al. (2019a), Freitas et al. (2019b) amongst others, we have produced this list of species.

**Additional information:** We define coastal species as those occurring at depths of up to 200 metres. This definition includes species that may be more commonly found below this depth, but which are known to occur, at least occasionally, in shallower waters.

Other species are possibly present, but have not yet been detected, such as *Isistius* spp. (see Barcelos et al. 2024). The Cabo Verde Islands lie within the distribution range of both species of this genus and interactions between these species and cetaceans in Cabo Verdean waters have already been documented (Wenzel and Suárez 2021).

## Project description

**Title:** Checklist list of Coastal fishes of Cabo Verde.

**Personnel:** Evandro P Lopes acted as collection curator and database management.

**Study area description:** Located in the eastern central Atlantic, 570 km west of Ngor Island (Senegal, West African coast) the Cabo Verde archipelago is composed of ten islands and eight islets formed by rock accumulation arising from volcanic eruptions from a hotspot under submarine platforms. The total land area of 4,033 km<sup>2</sup> with ~ 965 km of coastline which is believed to have formed between ~ 3 to 15.8 Ma. The insular marine platform (< 200 m) surrounding the islands covers approximately 1,900 km<sup>2</sup>, representing only 0.2% of the total Cabo Verde Exclusive Economic Zone (EEZ). The total EEZ area of Cabo Verde accounts for 796,000 km<sup>2</sup> excluding the insular shelf area (isobaths depth < 200 m).

**Design description:** State-of-the-art literature review.

## Sampling methods

**Description:** Literature review including all published and confirmed occurrences focusing on updated and recent publications.

**Sampling description:** State-of-the-art literature review.

**Step description:** Literature review, fieldwork (sampling), occurrence confirmation.



Geographic coverage

**Description:** Surrounding area of the Cabo Verde archipelago, spreading from the country's Exclusive Economic Zone (ZEE).

**Coordinates:** 14 and 18 Latitude; -26 and -22 Longitude.

Taxonomic coverage

**Description:** This list comprises all shallow water (down to 200 m) records of both elasmobranch and actinopterygians so far confirmed for the geographical area of Cabo Verde. The results presented are updated and subject to changes as all checklists are dynamic.

This checklist (Table 2) comprises 393 species across 38 orders and 125 families (Table 3). Species are listed alphabetically within families, following the taxonomy proposed by Fricke et al. (2025) and Van der Laan et al. (2025).

Table 2. List of coastal species from Cabo Verde, with orders and families, following the phylogenetic organisation proposed by Van der Laan et al. (2025).			
Order	Family	cientific Name	References
Hexanchiformes	Hexanchidae	<i>Hepranchias perlo</i> (Bonnaterre, 1788)	Menezes et al. (2004)
Hexanchiformes	Hexanchidae	<i>Hexanchus griseus</i> (Bonnaterre, 1788)	Hazevoet (2015)
Orectolobiformes	Rhincodontidae	<i>Rhincodon typus</i> Smith, 1828	Wirtz et al. (2013), Varela et al. (2025)
Orectolobiformes	Ginglymostomatidae	<i>Ginglymostoma cirratum</i> (Bonnaterre, 1788)	Wirtz et al. (2013), Freitas et al. (2019a)
Lamniformes	Odontaspidae	<i>Carcharias taurus</i> Rafinesque, 1810	Wirtz et al. (2013)
Lamniformes	Odontaspidae	<i>Odontaspis ferox</i> (Risso, 1810)	Reiner (1996), Menezes et al. (2015)
Lamniformes	Alopiidae	<i>Alopias superciliosus</i> Lowe, 1841	Wirtz et al. (2013)
Lamniformes	Alopiidae	<i>Alopias vulpinus</i> (Bonnaterre, 1788)	Carpenter and De Angelis (2016a); Eichenbaum (pers. comm. to Rui Freitas)
Lamniformes	Cetorhinidae	<i>Cetorhinus maximus</i> (Gunnerus, 1765)	Wirtz et al. (2013)

Order	Family	cientific Name	References
Lamniformes	Lamnidae	<i>Carcharodon carcharias</i> (Linnaeus, 1758)	Wirtz et al. (2013)
Lamniformes	Lamnidae	<i>Isurus oxyrinchus</i> Rafinesque, 1810	Wirtz et al. (2013)
Lamniformes	Lamnidae	<i>Isurus paucus</i> Guitart Manday, 1966	Wirtz et al. (2013)
Carcharhiniformes	Pseudotriakidae	<i>Galeorhinus galeus</i> (Linnaeus, 1758)	Wirtz et al. (2013)
Carcharhiniformes	Leptochariidae	<i>Leptocharias smithii</i> (Müller & Henle, 1839)	Wirtz et al. (2013)
Carcharhiniformes	Triakidae	<i>Mustelus mustelus</i> (Linnaeus, 1758)	Krakstad et al. (2011), Menezes et al. (2015)
Carcharhiniformes	Hemigaleidae	<i>Paragaleus pectoralis</i> (Garman, 1906)	Wirtz et al. (2013)
Carcharhiniformes	Carcharhinidae	<i>Carcharhinus altimus</i> (Springer, 1950)	Wirtz et al. (2013)
Carcharhiniformes	Carcharhinidae	<i>Carcharhinus brevipinna</i> (Valenciennes, 1839)	Wirtz et al. (2013)
Carcharhiniformes	Carcharhinidae	<i>Carcharhinus falciformis</i> (Bibron, 1839)	Wirtz et al. (2013)
Carcharhiniformes	Carcharhinidae	<i>Carcharhinus galapagensis</i> (Snodgrass & Heller, 1905)	Wirtz et al. (2013)
Carcharhiniformes	Carcharhinidae	<i>Carcharhinus leucas</i> (Valenciennes, 1839)	Wirtz et al. (2013)
Carcharhiniformes	Carcharhinidae	<i>Carcharhinus limbatus</i> (Valenciennes, 1839)	Wirtz et al. (2013)
Carcharhiniformes	Carcharhinidae	<i>Carcharhinus longimanus</i> (Poey, 1861)	Wirtz et al. (2013)
Carcharhiniformes	Carcharhinidae	<i>Carcharhinus obscurus</i> (Lesueur, 1818)	Wirtz et al. (2013)
Carcharhiniformes	Carcharhinidae	<i>Carcharhinus plumbeus</i> (Nardo, 1827)	Wirtz et al. (2013)
Carcharhiniformes	Carcharhinidae	<i>Carcharhinus signatus</i> (Poey, 1868)	Wirtz et al. (2013)
Carcharhiniformes	Carcharhinidae	<i>Galeocerdo cuvier</i> (Péron & Lesueur, 1822)	Wirtz et al. (2013)



Order	Family	cientific Name	References
Carcharhiniformes	Carcharhinidae	<i>Negaprion brevirostris</i> (Poey, 1868)	Debeius and Kuitert (2006), Wirtz et al. (2013)
Carcharhiniformes	Carcharhinidae	<i>Prionace glauca</i> (Linnaeus, 1758)	Wirtz et al. (2013)
Carcharhiniformes	Carcharhinidae	<i>Rhizoprionodon acutus</i> (Rüppell, 1837)	Wirtz et al. (2013)
Carcharhiniformes	Sphyrnidae	<i>Sphyrna lewini</i> (Griffith & Smith, 1834)	Varela et al. (2025)
Carcharhiniformes	Sphyrnidae	<i>Sphyrna mokarran</i> (Rüppell, 1837)	Wirtz et al. (2013)
Carcharhiniformes	Sphyrnidae	<i>Sphyrna zygaena</i> (Linnaeus, 1758)	Wirtz et al. (2013)
Squaliformes	Squalidae	<i>Squalus megalops</i> (Macleay, 1881)	Freitas et al. (2018)
Torpediniformes	Torpedinidae	<i>Torpedo mackayana</i> Metzelaar, 1919	Ratão et al. (2022)
Torpediniformes	Torpedinidae	<i>Torpedo marmorata</i> Risso, 1810	Wirtz et al. (2013)
Rhinopristiformes	Glaucostegidae	<i>Glaucostegus cemiculus</i> (Geoffroy St. Hilaire, 1817)	Freitas et al. (2018)
Rajiformes	Rajidae	<i>Raja herwigi</i> Krefft, 1965	Wirtz et al. (2013)
Myliobatiformes	Dasyatidae	<i>Bathytoshia centroura</i> (Mitchill, 1815)	Wirtz et al. (2013)
Myliobatiformes	Dasyatidae	<i>Dasyatis pastinaca</i> (Linnaeus, 1758)	Krakstad et al. (2011), Wirtz et al. (2013)
Myliobatiformes	Dasyatidae	<i>Fontitrygon margarita</i> (Günther, 1870)	Wirtz et al. (2013)
Myliobatiformes	Dasyatidae	<i>Pteroplatytrygon violacea</i> (Bonaparte, 1832)	Debelius (1997)
Myliobatiformes	Dasyatidae	<i>Taeniurops grabatus</i> (Geoffroy St.Hilaire, 1817)	Wirtz et al. (2013)
Myliobatiformes	Gymnuridae	<i>Gymnura altavela</i> (Linnaeus, 1758)	Thomas Eichenbaum, pers. comm. to RF
Myliobatiformes	Aetobatidae	<i>Aetobatus narinari</i> (Euphrasen, 1790)	Debelius (1997), Carpenter and De Angelis (2016a)



Order	Family	cientific Name	References
Myliobatiformes	Myliobatidae	<i>Myliobatis aquila</i> (Linnaeus, 1758)	Wirtz et al. (2013), Carpenter and De Angelis (2016a)
Myliobatiformes	Mobulidae	<i>Mobula alfredi</i> (Krefft, 1868)	Marshall et al. (2009), Wirtz et al. (2013)
Myliobatiformes	Mobulidae	<i>Mobula birostris</i> (Walbaum, 1792)	Wirtz et al. (2013)
Myliobatiformes	Mobulidae	<i>Mobula tarapacana</i> (Philippi, 1892)	Wirtz et al. (2013)
Myliobatiformes	Mobulidae	<i>Mobula thurstoni</i> (Lloyd, 1908)	Ratão et al. (2017)
Elopiformes	Elopidae	<i>Elops senegalensis</i> Regan, 1909	Freitas et al. (2018)
Elopiformes	Megalopidae	<i>Megalops atlanticus</i> Valenciennes, 1847	Wirtz et al. (2013)
Albuliformes	Albulidae	<i>Albula goreensis</i> Valenciennes, 1847	Quéro et al. (1990)
Albuliformes	Albulidae	<i>Nemoossis belloci</i> (Cadenat, 1937)	Wirtz et al. (2013), Hidaka et al. (2017)
Anguilliformes	Synphobranchidae	<i>Synphobranchus affinis</i> Günther, 1877	Almeida et al. (2010), González et al. (2014), González et al. (2021a)
Anguilliformes	Myrocongridae	<i>Myroconger compressus</i> Günther, 1870	González et al. (2014), González et al. (2021)
Anguilliformes	Muraenidae	<i>Anarchias longicauda</i> (Peter, 1877)	Smith (2012), Wirtz et al. (2013)
Anguilliformes	Muraenidae	<i>Channomuraena vittata</i> (Richardson, 1845)	Duarte Lopes et al. (2001), Wirtz et al. (2013)
Anguilliformes	Muraenidae	<i>Echidna peli</i> (Kaup, 1856)	Fernandez-Gil et al. (2013), Wirtz et al. (2013), González et al. (2021b), Mascarenhas (2022)
Anguilliformes	Muraenidae	<i>Enchelycore anatina</i> (Lowe, 1838)	Lipej et al. (2011), Wirtz et al. (2013), González et al. (2021b)
Anguilliformes	Muraenidae	<i>Enchelycore nigricans</i> (Bonnaterre, 1788)	Brito et al. (1999), Fernández-Gil et al. (2013), González et al. (2021b)
Anguilliformes	Muraenidae	<i>Gymnothorax afer</i> Bloch, 1795	Brito et al. (1999), González et al. (2021b)

Order	Family	cientific Name	References
Anguilliformes	Muraenidae	<i>Gymnothorax bacalladoi</i> Böhlke & Brito, 1987	Brito et al. (1999), González et al. (2021b)
Anguilliformes	Muraenidae	<i>Gymnothorax maderensis</i> (Johnson, 1862)	González et al. 2014, González et al. 2021b
Anguilliformes	Muraenidae	<i>Gymnothorax miliaris</i> (Kaup, 1856)	Brito et al. (1999), González et al. (2021b) , Mascarenhas (2022)
Anguilliformes	Muraenidae	<i>Gymnothorax polygonius</i> Poey, 1875	Monteiro (2008), González et al. (2021b)
Anguilliformes	Muraenidae	<i>Gymnothorax unicolor</i> (Delaroche, 1809)	Brito et al. (1999), Fernández-Gil et al. (2013), González et al. (2021b), Mascarenhas (2022)
Anguilliformes	Muraenidae	<i>Gymnothorax vicinus</i> (Castelnau, 1855)	Monteiro (2008), Fernández-Gil et al. (2013), González et al. (2021b), Mascarenhas (2022)
Anguilliformes	Muraenidae	<i>Monopenchelys acuta</i> (Parr, 1930)	Brito et al. (1999), González et al. (2021b)
Anguilliformes	Muraenidae	<i>Muraena augusti</i> (Kaup, 1856)	Fernández-Gil et al. (2013), González et al. (2021b), Mascarenhas (2022)
Anguilliformes	Muraenidae	<i>Muraena helena</i> Linnaeus, 1758	Brito et al. (1999), Fernández-Gil et al. (2013), González et al. (2021b)
Anguilliformes	Muraenidae	<i>Muraena melanotis</i> (Kaup, 1859)	Brito et al. (1999), Fernández-Gil et al. (2013), González et al. (2021b), Mascarenhas (2022)
Anguilliformes	Muraenidae	<i>Muraena robusta</i> Osório, 1911	Monteiro (2008), Fernández-Gil et al. (2013), González et al. (2021b)
Anguilliformes	Muraenidae	<i>Uropterygius wheeleri</i> Blache, 1967	Quéro et al. (1990), Wirtz et al. (2013), González et al. (2021b)
Anguilliformes	Ophichthidae	<i>Apterichtus anguiformis</i> (Peters, 1877)	Quéro et al. (1990), Wirtz et al. (2013)
Anguilliformes	Ophichthidae	<i>Apterichtus monodi</i> (Roux, 1966)	Wirtz et al. (2013), Carpenter and De Angelis (2016a)
Anguilliformes	Ophichthidae	<i>Brachysomophis atlanticus</i> Blache & Saldanha, 1972	McCosker and Wirtz (2008)
Anguilliformes	Ophichthidae	<i>Callechelys guineensis</i> (Osório, 1893)	Wirtz (2022a)



Order	Family	cientific Name	References
Anguilliformes	Ophichthidae	<i>Callechelys muraena</i> Jordan & Evermann, 1887	Menut and Bérenger (2016), Wirtz (2022b)
Anguilliformes	Ophichthidae	<i>Echelus myrus</i> (Linnaeus, 1758)	Wirtz et al. (2013)
Anguilliformes	Ophichthidae	<i>Echelus pachyrhynchus</i> (Vaillant, 1888)	González et al. (2014)
Anguilliformes	Ophichthidae	<i>Myrichthys pardalis</i> (Valenciennes, 1839)	González et al. (2014), Mascarenhas (2022)
Anguilliformes	Ophichthidae	<i>Mystriophis rostellatus</i> (Richardson, 1848)	Menezes et al. (2004), Wirtz et al. (2013)
Anguilliformes	Ophichthidae	<i>Ophichthus ophis</i> (Linnaeus, 1758)	D' Oliveira (2010), Menut and Bérenger (2016), Wirtz (2022b)
Anguilliformes	Ophichthidae	<i>Phaenomonas longissima</i> (Cadenat & Marchal, 1963)	Wirtz et al. (2013), González et al. (2014)
Anguilliformes	Nettastomatidae	<i>Heteroconger longissimus</i> Günther, 1870	Wirtz et al. (2013)
Anguilliformes	Congridae	<i>Ariosoma balearicum</i> (Delaroche, 1809)	D' Oliveira (2010), Wirtz et al. (2013)
Anguilliformes	Congridae	<i>Conger conger</i> (Linnaeus, 1758)	González and Tariche (2008), Wirtz et al. (2013)
Anguilliformes	Congridae	<i>Gnathophis mystax</i> (Delaroche, 1809)	González et al. (2014)
Anguilliformes	Congridae	<i>Paraconger notialis</i> Kanazawa, 1961	Monteiro (2008), Menut and Bérenger (2016)
Clupeiformes	Clupeidae	<i>Sardinella aurita</i> Valenciennes, 1847	Reiner (1996), Wirtz et al. (2013)
Clupeiformes	Clupeidae	<i>Sardinella maderensis</i> (Lowe, 1838)	Monteiro (1998), Wirtz et al. (2013)
Siluriformes	Ariidae	<i>Carlarius latiscutatus</i> (Günther, 1864)	Freitas et al. (2018)
Aulopiformes	Aulopidae	<i>Aulopus filamentosus</i> (Bloch, 1792)	Menezes et al. (2015)
Aulopiformes	Chlorophthalmidae	<i>Chlorophthalmus agassizi</i> Bonaparte, 1840	Orrell (2011), Carpenter and De Angelis (2016a)
Aulopiformes	Synodontidae	<i>Saurida parri</i> Norman, 1935	Carpenter and De Angelis (2016a)

Order	Family	cientific Name	References
Aulopiformes	Synodontidae	<i>Saurida brasiliensis</i> Norman, 1935	Wieber (2011)
Aulopiformes	Synodontidae	<i>Synodus saurus</i> (Linnaeus, 1758)	Menezes et al. (2004), Menezes et al. (2015), Menut and Béranger (2016)
Aulopiformes	Synodontidae	<i>Synodus synodus</i> (Linnaeus, 1758)	Menezes et al. (2015), Menut and Béranger (2016)
Aulopiformes	Synodontidae	<i>Trachinocephalus myops</i> (Forster, 1801)	Quéro et al. (1990)
Lampriformes	Lampridae	<i>Lampris guttatus</i> (Brünnich, 1788)	Carpenter and De Angelis (2016a)
Lampriformes	Trachipteridae	<i>Zu cristatus</i> (Bonelli, 1819)	Wirtz et al. (2013)
Polymixiiformes	Polymixiidae	<i>Polymixia nobilis</i> Lowe, 1838	González et al. (2014)
Zeiformes	Zeidae	<i>Zenopsis conchifer</i> (Lowe, 1852)	Menezes et al. (2015)
Zeiformes	Zeidae	<i>Zeus faber</i> Linnaeus, 1758	Krakstad et al. (2011), Wirtz et al. (2013)
Gadiformes	Phycidae	<i>Phycis phycis</i> (Linnaeus, 1766)	Menezes et al. (2004), Wirtz et al. (2013), Menezes et al. (2015)
Gadiformes	Merlucciidae	<i>Merluccius senegalensis</i> Cadenat, 1950	Wirtz et al. (2013)
Gadiformes	Moridae	<i>Gadella imberbis</i> (Vaillant, 1888)	González et al. (2010), González et al. (2014), Biscoito and González (2017)
Gadiformes	Moridae	<i>Physiculus cyanostrophus</i> Anderson & Tweddle, 2002	González et al. (2010), González et al. (2014)
Gadiformes	Moridae	<i>Physiculus dalwigki</i> Kaup, 1858	Menezes et al. (2004), González et al. (2010), Menezes et al. (2015)
Gadiformes	Macrouridae	<i>Coelorinchus caelorhincus</i> (Risso, 1810)	Wieber (2011b), Carpenter and De Angelis (2016a)
Gadiformes	Macrouridae	<i>Nezumia africana</i> (Iwamoto, 1970)	González et al. (2014)
Trachichthyiformes	Trachichthyidae	<i>Gephyroberyx darwinii</i> (Johnson, 1866)	Menezes et al. (2004), González et al. (2014)
Trachichthyiformes	Trachichthyidae	<i>Hoplostethus cadenati</i> Quéro, 1974	Reiner (1996), Carpenter and De Angelis (2016a)



Order	Family	cientific Name	References
Trachichthyiformes	Trachichthyidae	<i>Hoplostethus mediterraneus</i> Cuvier, 1829	Reiner (1996), Carpenter and De Angelis (2016a)
Holocentriformes	Holocentridae	<i>Corniger spinosus</i> Agassiz, 1831	Wirtz et al. (2013)
Holocentriformes	Holocentridae	<i>Myripristis jacobus</i> Cuvier, 1829	Brito et al. (2006), Menezes et al. (2004), Menezes et al. (2015)
Holocentriformes	Holocentridae	<i>Sargocentron hastatum</i> (Cuvier, 1829)	Wirtz et al. (2013)
Ophidiiformes	Ophidiidae	<i>Brotula barbata</i> (Bloch & Schneider, 1801)	Menezes et al. (2004), Wirtz et al. (2013)
Ophidiiformes	Ophidiidae	<i>Ophidion saldanhai</i> Matallanas & Brito, 1999	Matallanas and Brito (1999), Wirtz et al. (2013)
Ophidiiformes	Carapidae	<i>Carapus acus</i> (Brünnich, 1768)	Wirtz et al. (2013)
Ophidiiformes	Bythitidae	<i>Grammonus longhursti</i> (Cohen, 1964)	Wirtz (2009)
Batrachoidiformes	Batrachoididae	<i>Halobatrachus didactylus</i> (Bloch & Schneider, 1801)	Reiner (1996), Wirtz et al. (2013)
Gobiiformes	Apogonidae	<i>Apogon imberbis</i> (Linnaeus, 1758)	Brito et al. (1999), Freitas et al. (2019a)
Gobiiformes	Apogonidae	<i>Paroncheilus affinis</i> (Poey, 1875)	Brito et al. (1999), Kuitert and Kozawa (2019)
Gobiiformes	Gobiidae	<i>Bathygobius casamancus</i> (Rochebrune, 1880)	Schliewen (2011), Menut and Béranger (2016)
Gobiiformes	Gobiidae	<i>Bathygobius soporator</i> (Valenciennes, 1837)	Schliewen (2011), Menut and Béranger (2016)
Gobiiformes	Gobiidae	<i>Didogobius kochi</i> Van Tassell, 1988	Schliewen (2011), Wirtz et al. (2013)
Gobiiformes	Gobiidae	<i>Didogobius wirtzi</i> Schliewen & Kovačić, 2008	Schliewen and Kovačić (2008), Menut and Béranger (2016)
Gobiiformes	Gobiidae	<i>Gnatholepis thompsoni</i> Jordan, 1904	Larson and Buckle (2012), Menut and Béranger (2016)
Gobiiformes	Gobiidae	<i>Gobius ateriformis</i> Brito & Miller, 2001	Brito and Miller (2001), Menut and Béranger (2016)
Gobiiformes	Gobiidae	<i>Gobius salamansa</i> Iglésias, Frotté & Sellos, 2015	Iglésias et al. (2015)

Order	Family	cientific Name	References
Gobiiformes	Gobiidae	<i>Gobius tetrophthalmus</i> Brito & Miller, 2001	Brito and Miller (2001), Freitas (2014)
Gobiiformes	Gobiidae	<i>Marcelogobius janetorum</i> (Schliewen, Wirtz & Kovačić, 2018)	Schliewen et al. (2018)
Gobiiformes	Gobiidae	<i>Mauligobius nigri</i> (Günther, 1861)	Brito and Miller (2001), Schliewen (2011), Freitas (2014)
Gobiiformes	Gobiidae	<i>Vanneaugobius canariensis</i> Van Tassel, Miller & Brito, 1988	Brito et al. (2006), Schliewen (2011), Wirtz et al. (2013)
Syngnathiformes	Dactylopteridae	<i>Dactylopterus volitans</i> (Linnaeus, 1758)	Brito et al. (1999), Monteiro (2008), Menut and Béranger (2016)
Syngnathiformes	Mullidae	<i>Mulloidichthys martinicus</i> (Cuvier, 1829)	Brito et al. (1999), Monteiro (2008), Menut and Béranger (2016)
Syngnathiformes	Mullidae	<i>Mullus africanus</i> Vasil'eva, 2011	Wirtz et al. (2013)
Syngnathiformes	Mullidae	<i>Pseudupeneus prayensis</i> (Cuvier, 1829)	Brito et al. (1999), Monteiro (2008), Menut and Béranger (2016)
Syngnathiformes	Callionymidae	<i>Callionymus bairdi</i> Jordan, 1888	Brito et al. (1999), Wirtz et al. (2013), Menut and Béranger (2016)
Syngnathiformes	Callionymidae	<i>Synchiropus phaeton</i> (Günther, 1861)	Krakstad et al. (2011)
Syngnathiformes	Aulostomidae	<i>Aulostomus strigosus</i> Wheeler, 1955	Brito et al. (1999), Menut and Béranger (2016), Mascarenhas (2022)
Syngnathiformes	Fistulariidae	<i>Fistularia petimba</i> Lacepède, 1803	Brito et al. (1999), Menezes et al. (2004), Wirtz et al. (2013)
Syngnathiformes	Fistulariidae	<i>Fistularia tabacaria</i> Linnaeus, 1758	Brito et al. (1999), Menut and Béranger (2016), Mascarenhas (2022)
Syngnathiformes	Centriscidae	<i>Macroramphosus scolopax</i> (Linnaeus, 1758)	Brito et al. (1999), Wirtz et al. (2013)
Syngnathiformes	Syngnathidae	<i>Hippocampus algiricus</i> Kaup, 1856	Wirtz et al. (2013), Menut and Béranger (2016)
Scombriformes	Ariommatidae	<i>Ariomma melana</i> (Ginsburg, 1954)	Krakstad et al. (2011)
Scombriformes	Stromateidae	<i>Stromateus fiatola</i> Linnaeus, 1758	Wirtz et al. (2013)



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Scombriformes	Pomatomidae	<i>Pomatomus saltatrix</i> (Linnaeus, 1766)	Monteiro (1998), Wirtz et al. (2013)
Scombriformes	Scombridae	<i>Acanthocybium solandri</i> (Cuvier, 1832)	Monteiro (2008), Wirtz et al. (2013)
Scombriformes	Scombridae	<i>Auxis rochei</i> (Risso, 1810)	González and Tariche (2008), Wirtz et al. (2013)
Scombriformes	Scombridae	<i>Auxis thazard</i> (Lacepède, 1800)	Wirtz et al. (2013), Mascarenhas (2022)
Scombriformes	Scombridae	<i>Euthynnus alletteratus</i> (Rafinesque, 1810)	Wirtz et al. (2013), Menut and Bérenger (2016)
Scombriformes	Scombridae	<i>Katsuwonus pelamis</i> (Linnaeus, 1758)	Wirtz et al. (2013)
Scombriformes	Scombridae	<i>Sarda sarda</i> (Bloch, 1793)	Brito et al. (1999), Wirtz et al. (2013)
Scombriformes	Scombridae	<i>Scomber colias</i> Gmelin, 1789	Quéro et al. (1990), Brás (2014)
Scombriformes	Scombridae	<i>Scomberomorus tritor</i> (Cuvier, 1832)	Reiner (1996), Wirtz et al. (2013)
Scombriformes	Scombridae	<i>Thunnus alalunga</i> (Bonnaterre, 1788)	Reiner (1996), Wirtz et al. (2013), Carpenter and De Angelis (2016a)
Scombriformes	Scombridae	<i>Thunnus albacares</i> (Bonnaterre, 1788)	Wirtz et al. (2013), Carpenter and De Angelis (2016a)
Scombriformes	Scombridae	<i>Thunnus obesus</i> (Lowe, 1839)	González and Tariche (2008), Wirtz et al. (2013), Carpenter and De Angelis (2016a)
Scombriformes	Scombridae	<i>Thunnus thynnus</i> (Linnaeus, 1758)	Reiner (1996), Di Natale and Rubio (2013), Carpenter and De Angelis (2016a)
Scombriformes	Gempylidae	<i>Promethichthys prometheus</i> (Cuvier, 1832)	González et al. (2014)
Carangiformes	Sphyraenidae	<i>Sphyraena barracuda</i> (Edwards, 1771)	Wirtz et al. (2013)
Carangiformes	Sphyraenidae	<i>Sphyraena guachancho</i> Cuvier, 1829	Wirtz et al. (2013)
Carangiformes	Sphyraenidae	<i>Sphyraena viridensis</i> Cuvier, 1829	Wirtz et al. (2013), Menut and Bérenger (2016)
Carangiformes	Polynemidae	<i>Galeoides decadactylus</i> (Bloch, 1795)	Brito et al. (1999), Wirtz et al. (2013)

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Carangiformes	Citharidae	<i>Citharus linguatula</i> (Linnaeus, 1758)	Reiner (1996), Wirtz et al. (2013)
Carangiformes	Cyclopsettidae	<i>Citharichthys stampflii</i> (Steindachner, 1894)	Monteiro (2008), Wirtz et al. (2013)
Carangiformes	Cyclopsettidae	<i>Syacium guineense</i> (Bleeker, 1862)	Brito et al. (1999), Wirtz et al. (2013)
Carangiformes	Bothidae	<i>Arnoglossus imperialis</i> (Rafinesque, 1810)	Krakstad et al. (2011)
Carangiformes	Bothidae	<i>Arnoglossus thori</i> Kyle, 1913	Quéro et al. (1990), Wirtz et al. (2013)
Carangiformes	Bothidae	<i>Bothus podas</i> (Delaroche, 1809)	Wirtz et al. (2013), Mascarenhas (2022)
Carangiformes	Soleidae	<i>Microchirus hexophthalmus</i> (Bennett, 1831)	Krakstad et al. (2011)
Carangiformes	Soleidae	<i>Monochirus atlanticus</i> Chabanaud, 1940	Wirtz (2017)
Carangiformes	Soleidae	<i>Pegusa cadenati</i> Chabanaud, 1954	Wirtz et al. (2013), Mascarenhas (2022)
Carangiformes	Cynoglossidae	<i>Cynoglossus cadenati</i> Chabanaud, 1947	Fermon et al. (2022)
Carangiformes	Cynoglossidae	<i>Symphurus insularis</i> Munroe, Brito & Hernández, 2000	Munroe et al. (2000)
Carangiformes	Xiphiidae	<i>Xiphias gladius</i> Linnaeus, 1758	Menezes et al. (2004), Carpenter and De Angelis (2016a), González et al. (2020)
Carangiformes	Istiophoridae	<i>Istiophorus platypterus</i> (Shaw, 1792)	Carpenter and De Angelis (2016a)
Carangiformes	Istiophoridae	<i>Kajikia albida</i> (Poey, 1860)	Carpenter and De Angelis (2016a), González et al. (2020)
Carangiformes	Istiophoridae	<i>Makaira nigricans</i> Lacepède, 1802	González et al. (2020)
Carangiformes	Istiophoridae	<i>Tetrapturus pfluegeri</i> Robins & de Sylva, 1963	González et al. (2020)
Carangiformes	Carangidae	<i>Alectis ciliaris</i> (Bloch, 1787)	Wirtz et al. (2013), Menut and Béranger (2016)



Order	Family	cientific Name	References
Carangiformes	Carangidae	<i>Caranx crysos</i> (Mitchill, 1815)	Menezes et al. (2004), Wirtz et al. (2013), Menut and Bérenger (2016), González et al. (2020), Mascarenhas (2022)
Carangiformes	Carangidae	<i>Caranx hippos</i> (Linnaeus, 1766)	Wirtz et al. (2013), Mascarenhas (2022)
Carangiformes	Carangidae	<i>Caranx latus</i> Agassiz, 1831	Wirtz et al. (2013)
Carangiformes	Carangidae	<i>Caranx lugubris</i> Poey, 1860	Wirtz et al. (2013), González et al. (2020)
Carangiformes	Carangidae	<i>Caranx rhonchus</i> Geoffroy St. Hilaire, 1817	Wirtz et al. (2013)
Carangiformes	Carangidae	<i>Caranx senegallus</i> Cuvier, 1833	Wirtz et al. (2013)
Carangiformes	Carangidae	<i>Decapterus macarellus</i> (Cuvier, 1833)	Wirtz et al. (2013), González et al. (2020)
Carangiformes	Carangidae	<i>Decapterus punctatus</i> (Cuvier, 1829)	Wirtz et al. (2013), González et al. (2020)
Carangiformes	Carangidae	<i>Decapterus tabl</i> Berry, 1968	González et al. (2020)
Carangiformes	Carangidae	<i>Elagatis bipinnulata</i> (Quoy & Gaimard, 1825)	Wirtz et al. (2013), González et al. (2020)
Carangiformes	Carangidae	<i>Lichia amia</i> (Linnaeus, 1758)	Wirtz et al. (2013)
Carangiformes	Carangidae	<i>Naucrates ductor</i> (Linnaeus, 1758)	Wirtz et al. (2013)
Carangiformes	Carangidae	<i>Pseudocaranx dentex</i> (Bloch & Schneider, 1801)	Wirtz et al. (2013), Mascarenhas (2022)
Carangiformes	Carangidae	<i>Selar crumenophthalmus</i> (Bloch, 1793)	Wirtz et al. (2013), González et al. (2020), Mascarenhas (2022)
Carangiformes	Carangidae	<i>Selene dorsalis</i> (Gill, 1863)	Wirtz et al. (2013), González et al. (2020), Mascarenhas (2022)
Carangiformes	Carangidae	<i>Seriola carpenteri</i> Mather, 1971	Wirtz et al. (2013)
Carangiformes	Carangidae	<i>Seriola dumerili</i> (Risso, 1810)	Wirtz et al. (2013)
Carangiformes	Carangidae	<i>Seriola fasciata</i> (Bloch, 1793)	Wirtz et al. (2013), González et al. (2020)

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Carangiformes	Carangidae	<i>Seriola rivoliana</i> Valenciennes, 1833	Wirtz et al. (2013), González et al. (2020) , Mascarenhas (2022)
Carangiformes	Carangidae	<i>Trachinotus goreensis</i> Cuvier, 1832	Wirtz et al. (2013), González et al. (2020)
Carangiformes	Carangidae	<i>Trachinotus maxillosus</i> Cuvier, 1832	Carpenter and De Angelis (2016a), Mascarenhas (2022)
Carangiformes	Carangidae	<i>Trachinotus ovatus</i> (Linnaeus, 1758)	Wirtz et al. (2013), González et al. (2020) , Mascarenhas (2022)
Carangiformes	Carangidae	<i>Trachinotus teraia</i> Cuvier, 1832	Wirtz et al. (2013)
Carangiformes	Carangidae	<i>Trachurus picturatus</i> (Bowdich, 1825)	Wirtz et al. (2013)
Carangiformes	Carangidae	<i>Trachurus trecae</i> Cadenat, 1950	Wirtz et al. (2013), González et al. (2020)
Carangiformes	Carangidae	<i>Uraspis helvola</i> (Forster, 1801)	Wirtz et al. (2013), Carpenter and De Angelis (2016a), Brito et al. (2017)
Carangiformes	Echeneidae	<i>Echeneis naucrates</i> Linnaeus, 1758	Wirtz et al. (2013)
Carangiformes	Echeneidae	<i>Remora brachyptera</i> (Lowe, 1839)	Wirtz et al. (2013)
Carangiformes	Echeneidae	<i>Remora remora</i> (Linnaeus, 1758)	Wirtz et al. (2013)
Carangiformes	Rachycentridae	<i>Rachycentron canadum</i> (Linnaeus, 1766)	Freitas et al. (2018)
Carangiformes	Coryphaenidae	<i>Coryphaena equiselis</i> Linnaeus, 1758	Wirtz et al. (2013)
Carangiformes	Coryphaenidae	<i>Coryphaena hippurus</i> Linnaeus, 1758	Wirtz et al. (2013), González et al. (2020)
Atheriniformes	Atherinidae	<i>Atherina lopeziana</i> Rossignol & Blache, 1961	Wirtz et al. (2013), Mascarenhas (2022)
Beloniformes	Scomberesocidae	<i>Scomberesox saurus</i> (Walbaum, 1792)	Wirtz et al. (2013)
Beloniformes	Belonidae	<i>Ablennes hians</i> (Valenciennes, 1846)	Wirtz et al. (2013), González et al. (2020)
Beloniformes	Belonidae	<i>Belone acus</i> Risso, 1827	Wirtz et al. (2013)



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Beloniformes	Belonidae	<i>Platybelone lovii</i> (Günther, 1866)	Wirtz et al. (2013), Mascarenhas (2022)
Beloniformes	Belonidae	<i>Tylosurus crocodilus</i> (Péron & Lesueur, 1821)	Wirtz et al. (2013)
Beloniformes	Belonidae	<i>Tylosurus imperialis</i> (Rafinesque, 1810)	Wirtz et al. (2013)
Beloniformes	Belonidae	<i>Tylosurus rafale</i> Collette & Parin, 1970	Wirtz et al. (2013), González et al. (2020)
Beloniformes	Hemiramphidae	<i>Euleptorhamphus velox</i> Poey, 1868	Wirtz et al. (2013)
Beloniformes	Hemiramphidae	<i>Hemiramphus balao</i> Lesueur, 1821	Wirtz et al. (2013)
Beloniformes	Hemiramphidae	<i>Hemiramphus brasiliensis</i> (Linnaeus, 1758)	Wirtz et al. (2013)
Beloniformes	Hemiramphidae	<i>Oxyporhamphus similis</i> Bruun, 1935	Wirtz et al. (2013)
Beloniformes	Exocoetidae	<i>Cheilopogon cyanopterus</i> (Valenciennes, 1847)	Wirtz et al. (2013)
Beloniformes	Exocoetidae	<i>Cheilopogon exsiliens</i> (Linnaeus, 1771)	Dooley et al. (2015)
Beloniformes	Exocoetidae	<i>Cheilopogon furcatus</i> (Mitchill, 1815)	Wirtz et al. (2013), Carpenter and De Angelis (2016a)
Beloniformes	Exocoetidae	<i>Cheilopogon pinnatibarbatus</i> (Bennett, 1831)	Wirtz et al. (2013), Carpenter and De Angelis (2016a)
Beloniformes	Exocoetidae	<i>Exocoetus obtusirostris</i> Günther, 1866	Wirtz et al. (2013), Carpenter and De Angelis (2016a)
Beloniformes	Exocoetidae	<i>Exocoetus volitans</i> Linnaeus, 1758	Wirtz et al. (2013), Carpenter and De Angelis (2016a)
Beloniformes	Exocoetidae	<i>Prognichthys gibbifrons</i> (Valenciennes, 1847)	Wirtz et al. (2013)
Cichliformes	Pomacentridae	<i>Abudefduf hoefleri</i> (Steindachner, 1881)	Wirtz et al. (2013), Carpenter and De Angelis (2016b), Mascarenhas (2022)
Cichliformes	Pomacentridae	<i>Abudefduf saxatilis</i> (Linnaeus, 1758)	Wirtz et al. (2013), Carpenter and De Angelis (2016b), Mascarenhas (2022)

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Cichliformes	Pomacentridae	<i>Abudefduf taurus</i> (Müller & Troschel, 1848)	Wirtz et al. (2013), Carpenter and De Angelis (2016b), Mascarenhas (2022)
Cichliformes	Pomacentridae	<i>Azurina multilineata</i> (Guichenot, 1853)	Wirtz et al. (2013), Carpenter and De Angelis (2016b), Mascarenhas (2022)
Cichliformes	Pomacentridae	<i>Chromis lubbocki</i> Edwards, 1986	Wirtz et al. (2013), Carpenter and De Angelis (2016b), Mascarenhas (2022)
Cichliformes	Pomacentridae	<i>Similiparma hermani</i> (Steindachner, 1887)	Wirtz et al. (2013), Carpenter and De Angelis (2016b), Mascarenhas (2022)
Cichliformes	Pomacentridae	<i>Similiparma lurida</i> (Cuvier, 1830)	Wirtz et al. (2013), Carpenter and De Angelis (2016b)
Cichliformes	Pomacentridae	<i>Stegastes imbricatus</i> Jenyns, 1840	Wirtz et al. (2013), Carpenter and De Angelis (2016b), Mascarenhas (2022)
Mugiliformes	Mugilidae	<i>Chelon bispinosus</i> (Bowdich, 1825)	Wirtz et al. (2013), Carpenter and De Angelis (2016a), Mascarenhas (2022)
Mugiliformes	Mugilidae	<i>Chelon labrosus</i> (Risso, 1827)	Wirtz et al. (2013), Carpenter and De Angelis (2016a)
Mugiliformes	Mugilidae	<i>Mugil bananensis</i> (Pellegrin, 1927)	Wirtz et al. (2013), Mascarenhas (2022)
Mugiliformes	Mugilidae	<i>Mugil capurii</i> (Perugia, 1892)	Wirtz et al. (2013)
Mugiliformes	Mugilidae	<i>Mugil cephalus</i> Linnaeus, 1758	Freitas et al. (2018)
Mugiliformes	Mugilidae	<i>Mugil curema</i> Valenciennes, 1836	Wirtz et al. (2013)
Blenniiformes	Gobiesocidae	<i>Apletodon barbatus</i> Fricke, Wirtz & Brito, 2010	Wirtz et al. (2013)
Blenniiformes	Gobiesocidae	<i>Diplecogaster pectoralis</i> Briggs, 1955	Wirtz et al. (2013)
Blenniiformes	Blenniidae	<i>Entomacrodus cadenati</i> Springer, 1967	Wirtz et al. (2013), Menut and Bérenger (2016)
Blenniiformes	Blenniidae	<i>Microlipophrys caboverdensis</i> (Wirtz & Bath, 1989)	Wirtz et al. (2013), Menut and Bérenger (2016), Mascarenhas (2022)
Blenniiformes	Blenniidae	<i>Ophioblennius atlanticus</i> (Valenciennes, 1836)	Wirtz et al. (2013), Menut and Bérenger (2016), Mascarenhas (2022)

Order	Family	cientific Name	References
Blenniiformes	Blenniidae	<i>Parablennius parvicornis</i> (Valenciennes, 1836)	Wirtz et al. (2013), Menut and Béranger (2016), Mascarenhas (2022)
Blenniiformes	Blenniidae	<i>Parablennius salensis</i> Bath, 1990	Wirtz et al. (2013), Menut and Béranger (2016), Mascarenhas (2022)
Blenniiformes	Blenniidae	<i>Scartella caboverdiana</i> Bath, 1990	Wirtz et al. (2013), Menut and Béranger (2016), Mascarenhas (2022)
Blenniiformes	Labrisomidae	<i>Labrisomus nuchipinnis</i> (Quoy & Gaimard, 1824)	Wirtz et al. (2013), Mascarenhas (2022)
Blenniiformes	Labrisomidae	<i>Malaccoctenus carrowi</i> Wirtz, 2014	Wirtz (2014), Mascarenhas (2022)
Perciformes	Serranidae	<i>Anthias anthias</i> (Linnaeus, 1758)	Wirtz et al. (2013), González et al. (2014)
Perciformes	Serranidae	<i>Mycteroperca fusca</i> (Lowe, 1838)	Wirtz et al. (2013), Menut and Béranger (2016), González et al. (2020), Mascarenhas (2022)
Perciformes	Serranidae	<i>Serranus atricauda</i> Günther, 1874	Wirtz et al. (2013), Menut and Béranger (2016), González et al. (2020)
Perciformes	Serranidae	<i>Serranus cabrilla</i> (Linnaeus, 1758)	Freitas et al. (2018)
Perciformes	Serranidae	<i>Serranus heterurus</i> (Cadenat, 1937)	Wirtz et al. 2013, Freitas et al. 2018
Perciformes	Epinephelidae	<i>Cephalopholis taeniops</i> (Valenciennes, 1828)	Wirtz et al. (2013), Menut and Béranger (2016), González et al. (2020), Mascarenhas (2022)
Perciformes	Epinephelidae	<i>Epinephelus costae</i> (Steindachner, 1878)	Wirtz et al. (2013)
Perciformes	Epinephelidae	<i>Epinephelus goreensis</i> (Valenciennes, 1830)	Wirtz et al. (2013), González et al. (2014), González et al. (2020)
Perciformes	Epinephelidae	<i>Epinephelus marginatus</i> (Lowe, 1834)	Wirtz et al. (2013), Menut and Béranger (2016), Freitas et al. (2019a), Mascarenhas (2022)
Perciformes	Liopropomatidae	<i>Liopropoma emanueli</i> Wirtz & Schliewen, 2012	Wirtz et al. (2013), Freitas (2014), Menut and Béranger (2016)
Perciformes	Grammistidae	<i>Pseudogramma guineensis</i> (Norman, 1935)	Wirtz et al. (2013), Menut and Béranger (2016)



Order	Family	cientific Name	References
Perciformes	Grammistidae	<i>Rypticus saponaceus</i> (Bloch & Schneider, 1801)	Wirtz et al. (2013), Menut and Béranger (2016), Freitas et al. (2019a)
Perciformes	Trachinidae	<i>Trachinus armatus</i> Bleeker, 1861	Wirtz et al. (2013), Carpenter and De Angelis (2016b)
Perciformes	Trachinidae	<i>Trachinus pellegrini</i> Cadenat, 1937	Wirtz et al. (2013), Carpenter and De Angelis (2016b)
Perciformes	Triglidae	<i>Chelidonichthys gabonensis</i> (Poll & Roux, 1955)	Krakstad et al. (2011), Wirtz et al. (2013)
Perciformes	Triglidae	<i>Chelidonichthys lastoviza</i> (Bonnaterre, 1788)	Krakstad et al. (2011)
Perciformes	Triglidae	<i>Lepidotrigla cadmani</i> Regan, 1915	Wirtz et al. (2013)
Perciformes	Scorpaenidae	<i>Helicolenus dactylopterus</i> (Delaroche, 1809)	González et al. (2014), Menezes et al. (2015), González et al. (2020)
Perciformes	Scorpaenidae	<i>Pontinus accraensis</i> Norman, 1935	Menezes et al. (2015)
Perciformes	Scorpaenidae	<i>Pontinus kuhlii</i> (Bowdich, 1825)	González et al. (2014), Menezes et al. (2015), González et al. (2020)
Perciformes	Scorpaenidae	<i>Scorpaena angolensis</i> Norman, 1935	Wirtz et al. (2013), Menezes et al. (2015), Carpenter and De Angelis (2016a)
Perciformes	Scorpaenidae	<i>Scorpaena elongata</i> Cadenat, 1943	González et al. (2014), Menezes et al. (2015), Carpenter and De Angelis (2016a)
Perciformes	Scorpaenidae	<i>Scorpaena laevis</i> Troschel, 1866	Wirtz et al. (2013), González et al. (2014), Carpenter and De Angelis (2016a), Mascarenhas (2022)
Perciformes	Scorpaenidae	<i>Scorpaena maderensis</i> Valenciennes, 1833	Wirtz et al. (2013), Carpenter and De Angelis (2016a), Mascarenhas (2022)
Perciformes	Scorpaenidae	<i>Scorpaena notata</i> Rafinesque, 1810	Wirtz et al. (2013), Carpenter and De Angelis (2016a)
Perciformes	Scorpaenidae	<i>Scorpaena scrofa</i> Linnaeus, 1758	Wirtz et al. (2013), Menezes et al. (2015), Carpenter and De Angelis (2016a), González et al. (2020)
Perciformes	Scorpaenidae	<i>Scorpaena stephanica</i> Cadenat, 1943	Wirtz et al. (2013), Russell et al. (2015)

Order	Family	cientific Name	References
Perciformes	Scorpaenidae	<i>Setarches guentheri</i> Johnson, 1862	Carpenter and De Angelis (2016a)
Labriformes	Labridae	<i>Acantholabrus palloni</i> (Risso, 1810)	Wirtz et al. (2013), Carpenter and De Angelis (2016b), González et al. (2018)
Labriformes	Labridae	<i>Bodianus scrofa</i> (Valenciennes, 1839)	Wirtz et al. (2013), Menezes et al. (2015), González et al. (2020)
Labriformes	Labridae	<i>Bodianus speciosus</i> (Bowdich, 1825)	Wirtz et al. (2013), Menut and Béranger (2016), Freitas et al. (2019a)
Labriformes	Labridae	<i>Coris atlantica</i> Günther, 1862	Wirtz et al. (2013), Menut and Béranger (2016), Freitas et al. (2019a), Mascarenhas (2022)
Labriformes	Labridae	<i>Doratonotus megalepis</i> Günther, 1862	Wirtz et al. (2013), Carpenter and De Angelis (2016b)
Labriformes	Labridae	<i>Lappanella fasciata</i> (Cocco, 1833)	González et al. (2014)
Labriformes	Labridae	<i>Scarus hoefleri</i> (Steindachner, 1881)	Wirtz et al. (2013), Freitas et al. (2019a), Mascarenhas (2022)
Labriformes	Labridae	<i>Sparisoma choati</i> Rocha, Brito & Robertson, 2012	Wirtz et al. (2013), Freitas et al. (2019a), Mascarenhas (2022)
Labriformes	Labridae	<i>Sparisoma cretense</i> (Linnaeus, 1758)	Wirtz et al. (2013), Freitas et al. (2019a), Mascarenhas (2022)
Labriformes	Labridae	<i>Sparisoma frondosum</i> (Agassiz, 1831)	Freitas et al. (2014), Menut and Béranger (2016)
Labriformes	Labridae	<i>Thalassoma newtoni</i> (Osório, 1891)	Reiner (2005) Fig. 7
Labriformes	Labridae	<i>Thalassoma pavo</i> (Linnaeus, 1758)	Wirtz et al. (2013), Menut and Béranger (2016), Freitas et al. (2019a), Mascarenhas (2022)
Labriformes	Labridae	<i>Xyrichtys novacula</i> (Linnaeus, 1758)	Wirtz et al. (2013), Carpenter and De Angelis (2016b), Menut and Béranger (2016), Mascarenhas (2022)
Labriformes	Uranoscopidae	<i>Uranoscopus cadenati</i> Poll, 1959	Wirtz et al. (2013), Menut and Béranger (2016)
Labriformes	Uranoscopidae	<i>Uranoscopus polli</i> Cadenat, 1951	Reiner (1996), Krakstad et al. (2011)

Order	Family	cientific Name	References
Labriformes	Pinguipedidae	<i>Parapercis atlantica</i> (Vaillant, 1887)	Krakstad et al. (2011), Carpenter and De Angelis (2016b)
Centrarchiformes	Girellidae	<i>Girella stuebeli</i> Troschel, 1866	Wirtz et al. (2013), Freitas (2014), Menut and Béranger (2016), Mascarenhas (2022)
Centrarchiformes	Kyphosidae	<i>Kyphosus bigibbus</i> Lacepède, 1801	Carpenter and De Angelis (2016b), Knudsen and Clements (2016)
Centrarchiformes	Kyphosidae	<i>Kyphosus sectatrix</i> (Linnaeus, 1758)	Knudsen and Clements (2013), Knudsen and Clements (2016)
Centrarchiformes	Kyphosidae	<i>Kyphosus vaigiensis</i> (Quoy & Gaimard, 1825)	Bañon and Carlos (2022)
Acropomatiformes	Epigonidae	<i>Epigonus constanciae</i> (Giglioli, 1880)	Wirtz et al. (2013)
Acropomatiformes	Polyprionidae	<i>Polyprion americanus</i> (Bloch & Schneider, 1801)	Wirtz et al. (2013)
Acanthuriformes	Gerreidae	<i>Eucinostomus melanopterus</i> (Bleeker, 1863)	Wirtz et al. (2013), Menut and Béranger (2016), Mascarenhas (2022)
Acanthuriformes	Gerreidae	<i>Gerres nigri</i> Günther, 1859	Wirtz et al. (2013)
Acanthuriformes	Ephippidae	<i>Chaetodipterus lippei</i> Steindachner, 1895	Wirtz et al. (2013), Carpenter and De Angelis (2016b)
Acanthuriformes	Ephippidae	<i>Ehippus goreensis</i> Cuvier, 1831	Wirtz et al. (2013), Carpenter and De Angelis (2016b), Menut and Béranger (2016)
Acanthuriformes	Sciaenidae	<i>Sciaena umbra</i> Linnaeus, 1758	Wirtz et al. (2013), Mascarenhas (2022)
Acanthuriformes	Sciaenidae	<i>Umbrina ronchus</i> Valenciennes, 1843	Wirtz et al. (2013), Freitas et al. (2019a)
Acanthuriformes	Haemulidae	<i>Parapristipoma humile</i> (Bowdich, 1825)	Wirtz et al. (2013), Freitas et al. (2019a), Mascarenhas (2022)
Acanthuriformes	Haemulidae	<i>Parapristipoma macrops</i> (Pellegrin, 1912)	González and Tariche (2008)
Acanthuriformes	Haemulidae	<i>Parapristipoma octolineatum</i> (Valenciennes, 1833)	Wirtz et al. (2013), Carpenter and De Angelis (2016b), Freitas et al. (2019a)
Acanthuriformes	Haemulidae	<i>Pomadasys incisus</i> (Bowdich, 1825)	Wirtz et al. (2013), Krakstad et al. (2011), Menezes et al. (2015)



Order	Family	cientific Name	References
Acanthuriformes	Haemulidae	<i>Pomadasys jubelini</i> (Cuvier, 1830)	Mascarenhas (2022)
Acanthuriformes	Haemulidae	<i>Pomadasys perotaei</i> (Cuvier, 1830)	Wirtz et al. (2013)
Acanthuriformes	Haemulidae	<i>Pomadasys rogerii</i> (Cuvier, 1830)	Wirtz et al. (2013), Menut and Béranger (2016)
Acanthuriformes	Lobotidae	<i>Lobotes surinamensis</i> (Bloch, 1790)	Wirtz et al. (2013)
Acanthuriformes	Emmelichthyidae	<i>Erythrocles monodi</i> Poll & Cadenat, 1954	Menezes et al. (2015)
Acanthuriformes	Lutjanidae	<i>Apsilus fuscus</i> Valenciennes, 1830	Wirtz et al. (2013), González et al. (2020)
Acanthuriformes	Lutjanidae	<i>Lutjanus agennes</i> Bleeker, 1863	Wirtz et al. (2013), Menezes et al. (2015)
Acanthuriformes	Lutjanidae	<i>Lutjanus dentatus</i> (Duméril, 1861)	Freitas et al. (2018)
Acanthuriformes	Lutjanidae	<i>Lutjanus fulgens</i> (Valenciennes, 1830)	Wirtz et al. (2013), Freitas et al. (2018), González et al. (2020)
Acanthuriformes	Lutjanidae	<i>Lutjanus goreensis</i> (Valenciennes, 1830)	Wirtz et al. (2013), Freitas et al. (2018)
Acanthuriformes	Latilidae	<i>Branchiostegus semifasciatus</i> (Norman, 1931)	Freitas et al. (2018)
Acanthuriformes	Pomacanthidae	<i>Holacanthus africanus</i> Cadenat, 1951	Wirtz et al. 2013, Menut and Béranger 2016, Freitas et al. 2019a
Acanthuriformes	Chaetodontidae	<i>Chaetodon hoeferi</i> Steindachner, 1881	Wirtz et al. (2013), Carpenter and De Angelis (2016b)
Acanthuriformes	Chaetodontidae	<i>Chaetodon robustus</i> Günther, 1860	Wirtz et al. (2013), Carpenter and De Angelis (2016b), Mascarenhas (2022)
Acanthuriformes	Chaetodontidae	<i>Prognathodes marcellae</i> (Poll, 1950)	Wirtz et al. (2013), Carpenter and De Angelis (2016b), Menut and Béranger (2016)
Acanthuriformes	Luvaridae	<i>Luvarus imperialis</i> Rafinesque, 1810	Reiner (1996)
Acanthuriformes	Acanthuridae	<i>Acanthurus chirurgus</i> (Bloch, 1787)	Brito et al. (1999), Wirtz et al. (2013)

Order	Family	cientific Name	References
Acanthuriformes	Acanthuridae	<i>Acanthurus monroviae</i> Steindachner, 1876	Wirtz et al. (2013), Menut and Béranger (2016), Freitas et al. (2019a), Mascarenhas (2022)
Acanthuriformes	Lethrinidae	<i>Lethrinus atlanticus</i> Valenciennes, 1830	Wirtz et al. (2013), Menut and Béranger (2016), González et al. (2020)
Acanthuriformes	Sparidae	<i>Boops boops</i> (Linnaeus, 1758)	Wirtz et al. (2013), González et al. (2020), Mascarenhas (2022)
Acanthuriformes	Sparidae	<i>Dentex macrophthalmus</i> (Bloch, 1791)	Wirtz et al. (2013), Menezes et al. (2015)
Acanthuriformes	Sparidae	<i>Diplodus fasciatus</i> (Valenciennes, 1830)	Wirtz et al. (2013), Menut and Béranger (2016), Mascarenhas (2022)
Acanthuriformes	Sparidae	<i>Diplodus lineatus</i> (Valenciennes, 1830)	Freitas et al. (2019a), González et al. (2020), Mascarenhas (2022)
Acanthuriformes	Sparidae	<i>Diplodus prayensis</i> Cadenat, 1964	Wirtz et al. (2013), Menut and Béranger (2016), Mascarenhas (2022)
Acanthuriformes	Sparidae	<i>Diplodus puntazzo</i> (Walbaum, 1792)	Wirtz et al. (2013)
Acanthuriformes	Sparidae	<i>Lithognathus mormyrus</i> (Linnaeus, 1758)	Wirtz et al. (2013), Menezes et al. (2015), Menut and Béranger (2016)
Acanthuriformes	Sparidae	<i>Oblada melanurus</i> (Linnaeus, 1758)	Wirtz et al. (2013), Morri et al. (2000)
Acanthuriformes	Sparidae	<i>Pagellus acarne</i> (Risso, 1827)	Wirtz et al. (2013), Menezes et al. (2015), González et al. (2020)
Acanthuriformes	Sparidae	<i>Pagellus erythrinus</i> (Linnaeus, 1758)	Wirtz et al. (2013), Carpenter and De Angelis (2016b)
Acanthuriformes	Sparidae	<i>Pagrus africanus</i> Akazaki, 1962	Wirtz et al. (2013), Menezes et al. (2015), González et al. (2020)
Acanthuriformes	Sparidae	<i>Pagrus auriga</i> Valenciennes, 1843	Wirtz et al. (2013), Freitas et al. (2018)
Acanthuriformes	Sparidae	<i>Sarpa salpa</i> (Linnaeus, 1758)	Wirtz et al. (2013), Carpenter and De Angelis (2016b), Mascarenhas (2022)
Acanthuriformes	Sparidae	<i>Spicara melanurus</i> (Valenciennes, 1830)	Wirtz et al. (2013), Freitas et al. (2019a), Mascarenhas (2022)
Acanthuriformes	Sparidae	<i>Spondyllosoma cantharus</i> (Linnaeus, 1758)	Wirtz et al. (2013), Menezes et al. (2015), González et al. (2020)



Order	Family	cientific Name	References
Acanthuriformes	Sparidae	<i>Virididentex acromegalus</i> (Osório, 1911)	Wirtz et al. (2013), Menezes et al. (2015), González et al. (2020), Mascarenhas (2022)
Acanthuriformes	Cepolidae	<i>Cepola pauciradiata</i> Cadenat, 1950	Wirtz et al. (2013)
Acanthuriformes	Priacanthidae	<i>Heteropriacanthus cruentatus</i> (Lacepède, 1801)	Wirtz et al. (2013), Menut and Bérenger (2016), Mascarenhas (2022)
Acanthuriformes	Priacanthidae	<i>Heteropriacanthus fulgens</i> (Lowe, 1838)	Fernandez-Silva and Ho (2017), Freitas et al. (2019a)
Acanthuriformes	Priacanthidae	<i>Priacanthus arenatus</i> Cuvier, 1829	Wirtz et al. (2013), González et al. (2020), Mascarenhas (2022)
Acanthuriformes	Caproidae	<i>Antigonia capros</i> Lowe, 1843	Krakstad et al. (2011), González et al. (2014)
Acanthuriformes	Caproidae	<i>Capros aper</i> (Linnaeus, 1758)	Wirtz et al. (2013), González et al. (2014), Carpenter and De Angelis (2016b)
Lophiiformes	Lophiidae	<i>Lophius vaillanti</i> Regan, 1903	Quéro et al. (1990), Menezes et al. (2015), Carpenter and De Angelis (2016a), Freitas et al. (2018)
Lophiiformes	Antennariidae	<i>Abantennarius nummifer</i> (Cuvier, 1817)	D' Oliveira (2010), Wirtz et al. (2013), Wirtz (2022c)
Lophiiformes	Antennariidae	<i>Antennarius multiocellatus</i> (Valenciennes, 1837)	Wirtz (2022c)
Lophiiformes	Antennariidae	<i>Antennarius pardalis</i> (Valenciennes, 1837)	Mascarenhas (2022), Wirtz (2022c)
Lophiiformes	Antennariidae	<i>Antennarius striatus</i> (Shaw, 1794)	Wirtz et al. (2013), Mascarenhas (2022), Wirtz (2022c)
Lophiiformes	Antennariidae	<i>Fowlerichthys senegalensis</i> Cadenat, 1959	Wirtz et al. (2013), Menut and Bérenger (2016), Mascarenhas (2022), Wirtz (2022c)
Lophiiformes	Antennariidae	<i>Histrio histrio</i> (Linnaeus, 1758)	Menut and Bérenger (2016), Wirtz et al. (2016), Wirtz (2022c)
Tetraodontiformes	Molidae	<i>Masturus lanceolatus</i> (Liénard, 1840)	Wirtz et al. (2013)
Tetraodontiformes	Molidae	<i>Mola alexandrini</i> (Ranzani, 1834)	D' Oliveira (2010), Wirtz and Biscoito (2019)

Order	Family	cientific Name	References
Tetraodontiformes	Molidae	<i>Ranzania laevis</i> (Pennant, 1776)	Wirtz et al. (2013)
Tetraodontiformes	Diodontidae	<i>Chilomycterus mauretanicus</i> (Le Danois, 1954)	Wirtz et al. (2013), Mascarenhas (2022)
Tetraodontiformes	Diodontidae	<i>Chilomycterus reticulatus</i> (Linnaeus, 1758)	Wirtz et al. (2013), Menezes et al. (2015), Menut and Bérenger (2016), Mascarenhas (2022)
Tetraodontiformes	Diodontidae	<i>Diodon eydouxii</i> Brisout de Barneville, 1846	Rui Freitas person. obser.; Fig. 8
Tetraodontiformes	Diodontidae	<i>Diodon holocanthus</i> Linnaeus, 1758	Wirtz et al. (2013), Menut and Bérenger (2016), Freitas et al. (2019b), Mascarenhas (2022)
Tetraodontiformes	Diodontidae	<i>Diodon hystrix</i> Linnaeus, 1758	Wirtz et al. (2013), Menut and Bérenger (2016), Freitas et al. (2019b), Mascarenhas (2022)
Tetraodontiformes	Tetraodontidae	<i>Canthigaster capistrata</i> (Lowe, 1839)	Wirtz et al. (2013), Menut and Bérenger (2016), Freitas et al. (2019a), Mascarenhas (2022)
Tetraodontiformes	Tetraodontidae	<i>Canthigaster supramacula</i> Moura & Castro, 2002	Wirtz et al. (2013)
Tetraodontiformes	Tetraodontidae	<i>Lagocephalus lagocephalus</i> (Linnaeus, 1758)	Wirtz et al. (2013), Menezes et al. (2015)
Tetraodontiformes	Tetraodontidae	<i>Sphoeroides marmoratus</i> (Lowe, 1838)	Wirtz et al. (2013), Menut and Bérenger (2016), Freitas et al. (2019a), Mascarenhas (2022)
Tetraodontiformes	Tetraodontidae	<i>Sphoeroides pachygaster</i> (Müller & Troschel, 1848)	Wirtz et al. (2013), Menezes et al. (2015)
Tetraodontiformes	Monacanthidae	<i>Aluterus heudelotii</i> Hollard, 1855	Wirtz et al. (2013), Krakstad et al. (2011), Menut and Bérenger (2016), Mascarenhas (2022)
Tetraodontiformes	Monacanthidae	<i>Aluterus monoceros</i> (Linnaeus, 1758)	Krakstad et al. (2011)
Tetraodontiformes	Monacanthidae	<i>Aluterus scriptus</i> (Osbeck, 1765)	Wirtz et al. (2013), Krakstad et al. (2011), Menut and Bérenger (2016)
Tetraodontiformes	Monacanthidae	<i>Aluterus schoepfii</i> (Walbaum, 1792)	Wirtz et al. (2013), Krakstad et al. (2011)

Order	Family	cientific Name	References
Tetraodontiformes	Monacanthidae	<i>Cantherhines macrocerus</i> (Hollard, 1853)	Wirtz et al. (2013)
Tetraodontiformes	Monacanthidae	<i>Stephanolepis hispida</i> (Linnaeus, 1766)	Krakstad et al. (2011), Wirtz et al. (2013), Menut and Bérenger (2016), Mascarenhas (2022)
Tetraodontiformes	Balistidae	<i>Balistes capriscus</i> Gmelin, 1789	Wirtz et al. (2013), Menezes et al. (2015)
Tetraodontiformes	Balistidae	<i>Balistes punctatus</i> Gmelin, 1789	Wirtz et al. (2013), Freitas et al. (2019a), Mascarenhas (2022)
Tetraodontiformes	Balistidae	<i>Balistes vetula</i> Linnaeus, 1758	Wirtz et al. (2013)
Tetraodontiformes	Balistidae	<i>Canthidermis maculata</i> (Bloch, 1786)	Wirtz et al. (2013)
Tetraodontiformes	Balistidae	<i>Canthidermis sufflamen</i> (Mitchill, 1815)	Wirtz et al. (2013), Menezes et al. (2015), Freitas et al. (2019a)
Tetraodontiformes	Balistidae	<i>Melichthys niger</i> (Bloch, 1786)	Wirtz et al. (2013)
Tetraodontiformes	Balistidae	<i>Rhinecanthus aculeatus</i> (Linnaeus, 1758)	Wirtz et al. (2013)

Table 3.  
Higher taxomomic levels (class, order and family) with the number of families by order and species by family.

Class	Order	Family	Family by Order	Species by Family
Elasmobranchii				
	Hexanchiformes		1	
		Hexanchidae		2
	Orectolobiformes		2	
		Rhincodontidae		1
		Ginglymostomatidae		1
	Lamniformes		4	
		Odontaspidae		2
		Alopiidae		2
		Cetorhinidae		1



Class	Order	Family	Family by Order	Species by Family
		Lamnidae		3
	Carcharhiniformes		6	
		Pseudotriakidae		1
		Leptochariidae		1
		Triakidae		1
		Hemigaleidae		1
		Carcharhinidae		14
		Sphyrnidae		3
	Squaliformes		1	
		Squalidae		1
	Torpediniformes		1	
		Torpedinidae		2
	Rhinopristiformes		1	
		Glaucostegidae		1
	Rajiformes		1	
		Rajidae		1
	Myliobatiformes		5	
		Dasyatidae		5
		Gymnuridae		1
		Aetobatidae		1
		Myliobatidae		1
		Mobulidae		4
Actinopteri				
	Elopiformes		2	
		Elopidae		1
		Megalopidae		1
	Albuliformes		1	
		Albulidae		2
	Anguilliformes		6	
		Synphobranchidae		1

Class	Order	Family	Family by Order	Species by Family
		Myrocongridae		1
		Muraenidae		18
		Ophichthidae		11
		Nettastomatidae		1
		Congridae		4
	Clupeiformes		1	
		Clupeidae		2
	Siluriformes		1	
		Ariidae		1
	Aulopiformes		3	
		Aulopidae		1
		Chlorophthalmidae		1
		Synodontidae		5
	Lampriformes		2	
		Lampridae		1
		Trachipteridae		1
	Polymixiiformes		1	
		Polymixiidae		1
	Zeiformes		1	
		Zeidae		2
	Gadiformes		4	
		Phycidae		1
		Merlucciidae		1
		Moridae		3
		Macrouridae		2
	Trachichthyiformes		1	
		Trachichthyidae		3
	Beryciformes		1	
		Holocentridae		3
	Ophidiiformes		3	

Class	Order	Family	Family by Order	Species by Family
		Ophidiidae		2
		Carapidae		1
		Bythitidae		1
	Batrachoidiformes		1	
		Batrachoididae		1
	Gobiiformes		2	
		Apogonidae		2
		Gobiidae		11
	Syngnathiformes		7	
		Dactylopteridae		1
		Mullidae		3
		Callionymidae		2
		Aulostomidae		1
		Fistulariidae		2
		Centriscidae		1
		Syngnathidae		1
	Scombriformes		5	
		Ariommatidae		1
		Stromateidae		1
		Pomatomidae		1
		Scombridae		12
		Gempylidae		1
	Carangiformes		13	
		Sphyraenidae		3
		Polynemidae		1
		Citharidae		1
		Cyclopsettidae		2
		Bothidae		3
		Soleidae		3
		Cynoglossidae		2



Class	Order	Family	Family by Order	Species by Family
		Xiphiidae		1
		Istiophoridae		4
		Carangidae		27
		Echeneidae		3
		Rachycentridae		1
		Coryphaenidae		2
	Atheriniformes		1	
		Atherinidae		1
	Beloniformes		4	
		Scomberesocidae		1
		Belonidae		6
		Hemiramphidae		4
		Exocoetidae		7
	Cichliformes		1	
		Pomacentridae		8
	Mugiliformes		1	
		Mugilidae		6
	Blenniiformes		3	
		Gobiesocidae		2
		Blenniidae		6
		Labrisomidae		2
	Perciformes		10	
		Serranidae		5
		Epinephelidae		4
		Liopropomatidae		1
		Grammistidae		2
		Trachinidae		2
		Triglidae		3
		Scorpaenidae		11
		Labridae		13

Class	Order	Family	Family by Order	Species by Family
		Uranoscopidae		2
		Pinguipedidae		1
	Centrarchiformes		2	
		Girellidae		1
		Kyphosidae		3
	Acropomatiformes		2	
		Epigonidae		1
		Polypriionidae		1
	Acanthuriformes		17	
		Gerreidae		2
		Ephippidae		2
		Sciaenidae		2
		Haemulidae		7
		Lobotidae		1
		Emmelichthyidae		1
		Lutjanidae		5
		Latilidae		1
		Pomacanthidae		1
		Chaetodontidae		3
		Luvaridae		1
		Acanthuridae		2
		Lethrinidae		1
		Sparidae		16
		Cepolidae		1
		Priacanthidae		3
		Caproidae		2
	Lophiiformes		2	
		Lophiidae		1
		Antennariidae		6
	Tetraodontiformes		5	

Class	Order	Family	Family by Order	Species by Family
		Molidae		3
		Diodontidae		5
		Tetraodontidae		5
		Monacanthidae		6
		Balistidae		7

Table 4.  
Taxonomic levels with numbers.

Taxon	number
Order	39
Family	125
Genus	266
Species	393

Taxa included:

Rank	Scientific Name	Common Name
class	Elasmobranchii	Elasmobranchs (Sharks and Rays)
class	Actinopteri	Ray finned fish

Temporal coverage

**Notes:** This work does not define a specific temporal scope, as it compiles data from historical inventories and faunistic records. By synthesising information across a broad temporal range and integrating it with current knowledge of Cabo Verde’s coastal ichthyofauna, the study presents a comprehensive overview of present understanding of coastal fish assemblages.

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Data resources

Data package title: Checklist list of Coastal fishes of Cabo Verde

Resource link: <https://www.gbif.org/dataset/ecf78ae1-c4dc-48cc-9ff3-bb77d46a8e76>

Alternative identifiers: [http://ipt.gbif.pt/ipt/resource?r=cabo\\_verde\\_coastal\\_fishes](http://ipt.gbif.pt/ipt/resource?r=cabo_verde_coastal_fishes)

Number of data sets: 1

Data set name: Checklist list of Coastal fishes of Cabo Verde

Character set: UTF-8

Download URL: [http://ipt.gbif.pt/ipt/archive.do?r=cabo\\_verde\\_coastal\\_fishes&v=1.1](http://ipt.gbif.pt/ipt/archive.do?r=cabo_verde_coastal_fishes&v=1.1)

Data format: Darwin Core

Description: List of coastal fish species (0-200 metres deep) with confirmed updated occurrences in the Cabo Verde archipelago.\*<sup>1</sup>

This list includes 393pecies belonging to the classes **Elasmobranchii** and **Actinopteri**. Taxonomic and phylogenetic ordering follows Fricke et al. (2025) and Van der Laan et al. (2025) down to the family level, with genera and species listed alphabetically.

For certain species, we were unable to confirm their occurrence in the archipelago or existing records were deemed dubious or erroneous. These taxa are listed in Table 5, along with the sources that previously reported them for Cabo Verde.

Table 5.  
Unconfirmed occurrences not included on the main checklist.

Family	Species	Occurrence status	Reference	Observations
Torpedinidae	<i>Torpedo torpedo</i> (Linnaeus, 1758)	Need Confirmation	Reiner (2005)	The photo in Reiner (2005) shows <i>Torpedo mamorata</i> Risso, 1810
Atherinidae	<i>Atherina presbyter</i> Cuvier, 1829	Doubtful	Mugé in Quéro et al. (1990)	Probably a confusion with <i>Atherina lopeziana</i> Rossignol & Blache 1961
Scorpaenidae	<i>Scorpaena canariensis</i> (Sauvage, 1878)	Mistaken	D' Oliveira (2010)	The blurred photo in D' Oliveira (2010) does not show this species

Family	Species	Occurrence status	Reference	Observations
Epinephelidae	<i>Epinephelus aeneus</i> (Geoffroy St. Hilaire, 1817)	Need Confirmation	Cadenat (1935), Reiner (1996), Monteiro (1998), Monteiro (2008)	The photo in Monteiro (1998), Monteiro (2008) and the photos labelled " <i>E. aeneus</i> " in the INDP data collection actually show <i>Epinephelus goreensis</i> (Valenciennes 1830). Cadenat (1935) explicitly notes the species not only from the African coast, but also from the Cape Verde Islands
Epinephelidae	<i>Mycteroperca rubra</i> (Bloch, 1793)	Mistaken	Reiner (1996)	Called <i>Mycteroperca rubra</i> (Bloch, 1793) by Monteiro (1998), Maggio et al. (2005), Medina et al. (2007) and others. A photo taken by RF at the Cape Verde Islands can be found in <a href="http://www.fishbase.org">www.fishbase.org</a>
Pomacentridae	<i>Chromis limbata</i> (Valenciennes, 1833)	Mistaken	Zander (2011)	Probably confusion with <i>Azurina multilineata</i> (Guichenot 1843)
Tetraodontidae	<i>Lagocephalus laevigatus</i> (Linnaeus, 1766)	Not valid	Lloris et al. (1991), Reiner (1996)	We can find no evidence for the presence of this species at the Cape Verde Islands

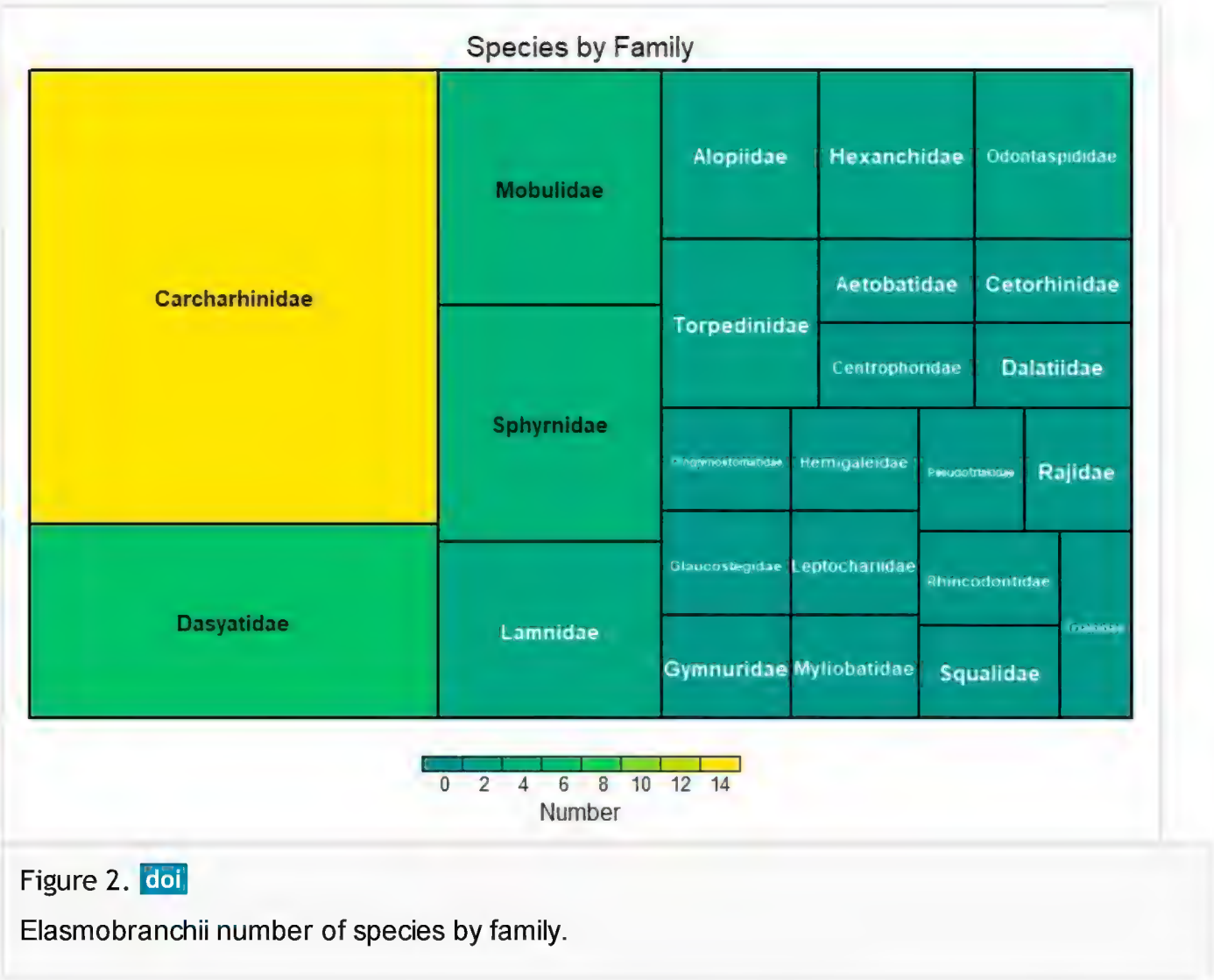
Column label	Column description
id	Life Sciences Identifier: World Register of Marine Species: Taxon ID.
taxonID	Life Sciences Identifier: World Register of Marine Species: Taxon ID.
acceptedNameUsagelD	Life Sciences Identifier: World Register of Marine Species: Taxon ID.
parentNameUsagelD	Parent Name: Life Sciences Identifier: World Register of Marine Species: Taxon ID.
parentNameUsage	parentNameUsage.
scientificName	scientificName.
Kingdom	Kingdom.
phylum	phylum.
class	class.
order	order.
family	family.
genus	genus.
specificEpithet	specificEpithet.
taxonRank	Rank of the taxon.
scientificNameAuthorship	Authorship of the scientific name.

Additional information

Coastal fishes from Cabo Verde (Eastern Central Atlantic).

Analysis and discussion

This dataset encompasses the classes Elasmobranchii and Actinopteri (Table 4). Elasmobranchii is represented by 10 orders, 22 families and 50 species (Figs 2, 3), while Actinopteri comprises 29 orders, 103 families and 343 species (Figs 4, 5).



Regarding conservation status (Fig. 6) and according to the IUCN Red List (IUCN 2024), the majority of species were assessed as of Least Concern. However, approximately 15% fall into threatened categories, including Vulnerable, Endangered or Critically Endangered.

Our species list is based primarily on the compilation by Wirtz et al. (2013), as it includes critical commentary on species occurrences. In some cases, we also incorporated earlier records not mentioned in Wirtz et al. (2013), as well as more recent publications that confirmed or expanded upon previous observations. Additionally, we considered selected ‘grey literature’ sources, which provide relevant information on species presence and photographic documentation, such as Mascarenhas (2022).

Wirtz et al. (2013) Wirtz et al. (2013) Mascarenhas (2022)



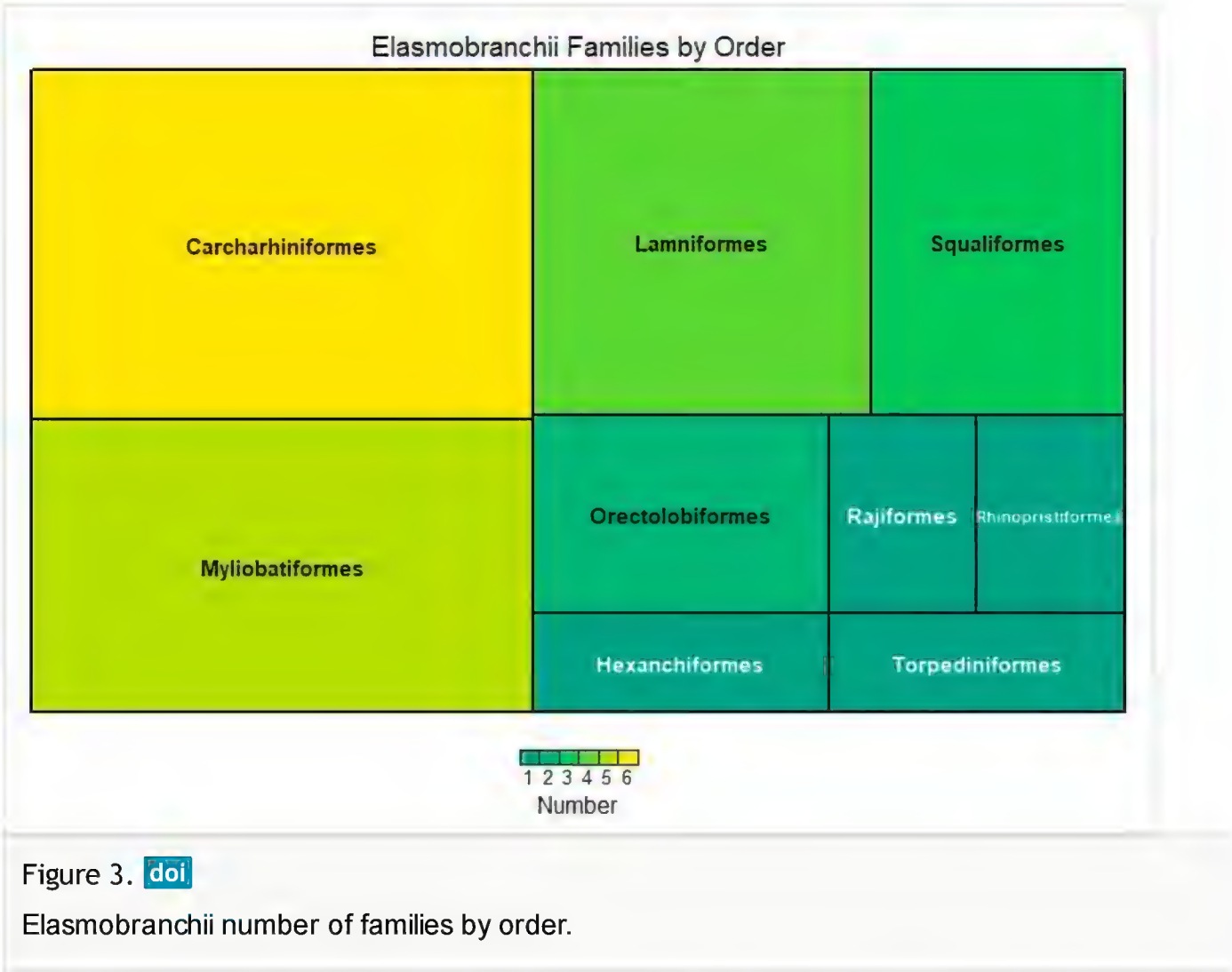


Figure 3. [doi](#)  
Elasmobranchii number of families by order.

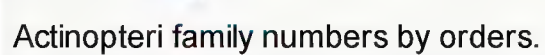
Since we followed the phylogenetic and taxonomic arrangement proposed by Fricke et al. (2025) and Van der Laan et al. (2025) Eschmeyer's Catalogue of Fishes, with orders and families sorted accordingly and species listed alphabetically. Scientific names and taxonomic validity were also based on Eschmeyer's taxonomy, which may differ from the nomenclature used in some of the referenced literature. This is exemplified by *Kyphosus* spp. and *Mullus africanus*, both considered valid species in Eschmeyer, whereas *Mullus argentinae africanus* is retained as a subspecies by Uiblein et al. (2024), who argues that the available evidence is insufficient to justify its elevation to species level. Another case is *Uraspis secunda*, recorded for Cabo Verde by Wirtz et al. (2013), yet considered a synonym of *Uraspis helvola* (Forster, 1801) in Eschmeyer. Further discussion on this taxonomic decision is provided by Carpenter and De Angelis (2016b).

In exceptional cases where new species records have not yet been formally published, we relied on first-hand observations reported to one of the authors (Rui Freitas - RF). These records were accepted when the observer's expertise was deemed sufficiently reliable to validate the occurrence. On two occasions, we confirmed species presence through museum specimens, namely *Saurida brasiliensis* Norman, 1935 and *Coelorinchus caelorhincus* (Risso, 1810); however, we were unable to locate the original publications corresponding to these records.

We here validate the presence of *Thalassoma newtoni* (Osório, 1891), which was initially mentioned by Reiner (2005), but listed as a "mistaken record" in Wirtz et al. (2013). Our confirmation is based on a video recording (Fig. 9), published on YouTube by

[illegible]

Actinopteri number of species by family.



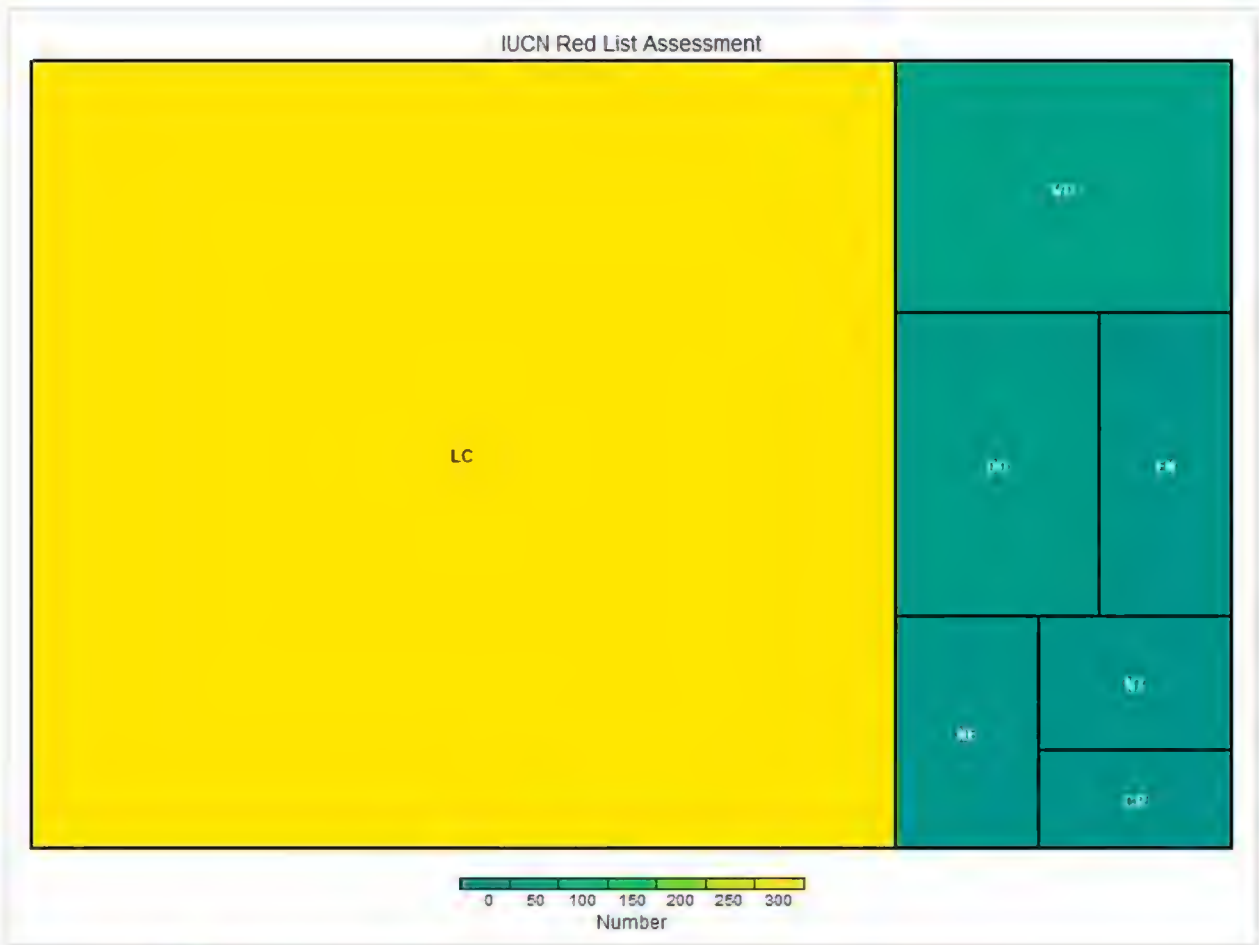


Figure 6. [doi](#)  
IUCN Accessemnts by numbers. NE - Not Evaluated, DD - Data Deficient, LC - Least Concern, NT - Near Threatned, VU - Vulnerable, EN - Endangered, CR - Critically Endangered.



Figure 7. [doi](#)  
A frame captured from a video recorded by @snorkeeb.716 in June 2018, at Tarrafal (Santiago Island, Cabo Verde), at timestamp 3 minutes and 45 seconds, clearly shows a specimen of *Thalassoma newtoni* (Osório, 1891).





Figure 8. [doi](#)

A photograph taken by Samir Martins in 2016 documents the presence of *Diodon eydouxii* Brisout de Barneville, 1846, at Ponta Antónia, Boa Vista Island (Cabo Verde).



Figure 9. [doi](#)

The video, recorded by @snorkeeb.716 in June 2018 at Tarrafal (Santiago Island, Cabo Verde), shows a specimen of *Thalassoma newtoni* (Osório, 1891) at the 3 minutes and 45 seconds mark.



Another noteworthy case is that of *Diodon eydouxii* Brisout de Barneville, 1846 (Fig. 8), which was found washed ashore at Ponta Antónia (Boa Vista Island). This specimen was one of 25 species stranded during the same event. To our knowledge, the only record of this occurrence was published in a local newspaper by RF. As far as we are aware, this constitutes the first confirmed and documented occurrence of the species within the Cabo Verde archipelago.

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## Author contributions

**LMDB:** Conceptualisation, Data curation, Investigation, Methodology, Validation, Visualisation, Writing - original draft, Writing - review and editing; **RF:** Conceptualisation, Data curation, Investigation, Methodology, Validation, Visualisation, Writing - original draft, Writing - review and editing; **JPB:** Conceptualisation, Funding acquisition, Investigation, Methodology, Resources, Supervision, Validation, Visualisation, Writing - original draft, Writing - review and editing.

**LMDB & RF** contributed equally as co-first authors

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## Endnotes

- \*1 This is a list of the species that we consider to have a confirmed presence in Cabo Verde. There may be other species that we are not aware of or that other authors consider to be present, as well as species whose presence is not considered by other authors.